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10/581,343	06/02/2006	Hirotama Fujimaru	0075868-000097	5041
21839	7590	04/05/2010		
BUCHANAN, INGERSOLL & ROONEY PC				EXAMINER
POST OFFICE BOX 1404				SASTRI, SATYA B
ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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***Advisory Action***

1. This office action is in response to amendment filed on 3/15/10. The amendment after a final rejection is being entered for the purposes of appeal. Claims 1-7, 9-22 are now pending in the application.

***Previously Cited Statutes***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-7, 9-13, 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatsuda et al. (US 5,140,076) and as evidenced by <http://www.wovenwire.com/reference/particle-size.htm>.

The rejections are adequately set forth in paragraph 3 of the office action dated 11/16/09 and are incorporated herein by reference.

***Allowable Subject Matter***

4. As indicated in paragraph 10 of the office action dated 3/11/09, claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

5. The rejections as set forth in the final office action dated 11/16/09 are maintained.

Applicant's arguments have been duly considered but are not deemed persuasive for the following reasons:

Applicants argue that (1) Hatsuda et al. relate to a method of treating the surface of an absorbent resin by crosslinking the surface region of the absorbent resin homogeneously and effectively using a crosslinking agent, (2) Hatsuda et al. does not teach or fairly suggest a water retaining material for cultivating plants comprising (B) a polyvalent metal compound, as presently recited in the independent claims and (3) polyvalent metal compounds are disclosed in an exhaustive laundry list and (4) the water proofing agent is one of several exemplary applications and conclude that of ordinary skill in the art would not have fortuitously selected the polyvalent metal compound and water proofing agent from the extensive list of Hatsuda et al.

With regard to (1) and (2), the Hatsuda et al. reference discloses mixing the water absorbent resin powder with a crosslinking agent so as to surface crosslink the resin. Applicant's claimed composition and the method of producing the same, as recited in independent claims, read on the disclosed mixture of pre-crosslinked water absorbent resin and surface crosslinking agent such as a polyvalent metal compound. Therefore, examiner maintains that the composition as claimed reads on the surface crosslinkable water absorbent resin comprising a water absorbent resin and a polyvalent metal compounds as the crosslinking agent.

Additionally, the presently recited limitation "for cultivating plants" is an intended use of the composition. The intended use language must result in a structural difference to patentably distinguish over the prior art. If the prior art structure or composition is capable of performing the intended use, then it meets the claim. MPEP 2112.02. The composition as disclosed in the Hatsuda et al. reference, upon heating, i.e. crosslinking, is capable of performing as a water-proofing agent for plants.

With regard to (3) and (4), it is noted that the Hatsuda et al. reference discloses alkali metal acrylate copolymer comprising 50 to 99% of alkali metal acrylate monomer as being particularly preferred (col. 3, lines 30-37, col. 3-4, bridging paragraph). Thus, the presently claimed alkali metal ion content in the range of 50-65% overlaps with the disclosed range. In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). See MPEP § 2144.05. Therefore, a combination of the particularly preferred water absorbent resins, including those having an alkali metal ion content in the overlapping range of 50 to 65% mol%, with any of the disclosed surface crosslinking agents, including polyvalent metal compounds would have been obvious to one skilled in the art. Additionally, the prior art discloses that the absorbent is not only useful as one of the component materials for sanitary articles but also as a sludge, as a dew drop proofing agent for building materials, as a water-proofing agent for agriculture and horticulture, and as a dryer (col. 10, lines 44-49). Given the teaching on possible areas of application, it have been obvious to one of ordinary skill in the art to utilize the compositions as water-proofing agent, i.e. the selection of water absorbent resins and polyvalent

compounds would not have been fortuitous for one skilled in the art. As not above, the limitation "for cultivating plants" in instant claims is an intended use of the composition.

Given that the presently claimed composition is obviated by the Hatsuda et al. reference because the polyvalent metal compound recited in the independent claims is not distinct from the polyvalent metal compound present in the surface crosslinkable water absorbent resin compositions of Hatsuda et al., the rejections as set forth for previously in the final rejection are maintained by the examiner.

### *Conclusion*

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 272 1112. The examiner can be reached on Mondays, Thursdays and Fridays, 7AM-5.30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. David Wu can be reached on 571-272-1114.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

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/Satya B Sastri/

Examiner, Art Unit 1796